CS161: Introduction to Computer Science
Lab Assignment 1

Getting Started

If you plan to use your own laptop, create a folder called `cs161` somewhere on your computer. This is where you will keep all of the labs and homework assignments for this class. Now download BlueJ onto your own laptop by going to `http://bluej.org/`

If you plan to use a lab machine, you'll need to bring a USB flash drive to lab. On your USB drive, create a folder called `cs161`. This is where you will keep all of the labs and homework assignments for this class. The lab machines already have BlueJ installed.
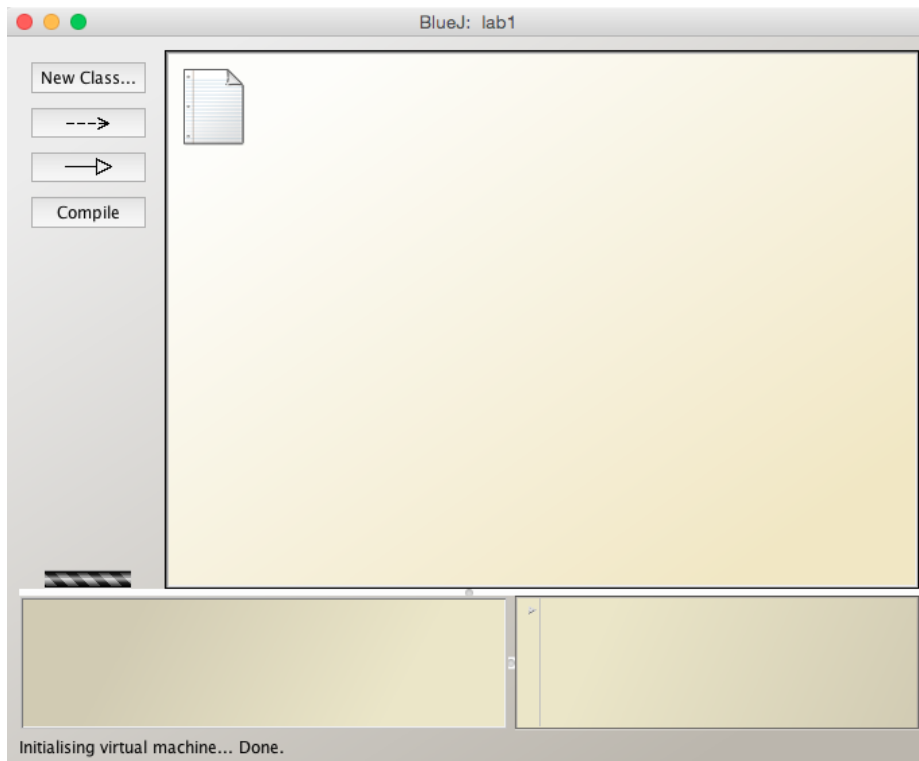
First Java Program

1. Open BlueJ on your machine.

2. Create a new Java project

    (a) Go to `Project > New Project`. This will open up a dialogue box.
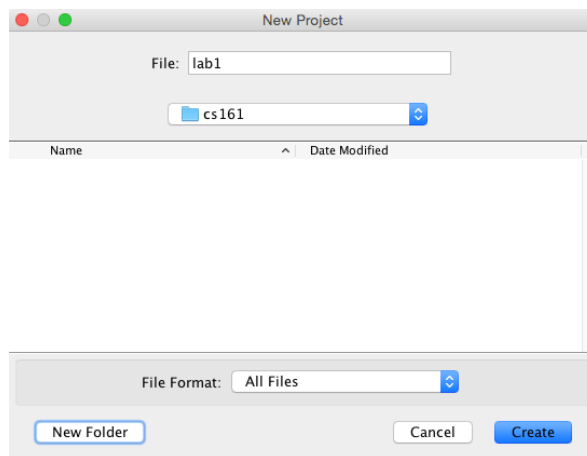
    (b) You may need to navigate to the `cs161` folder you created.

    (c) In the text field labeled "File:" type `lab1`. This is the name of the Java project you are creating.

(d) Hit the `Create` button and you should see a new empty Java project:

If you navigate to your `cs161` folder on your system (i.e. using Finder on Mac or Windows Explorer on Windows) you will notice that BlueJ has created a new folder called `lab1` and inside of this new folder will be all of the Java code that you write for this lab.

3. Create a new Java class called `Test` by clicking on the "`New Class...`" button in the left sidebar. A box icon with the name `Test` should appear in the Project window. This icon represents your Java class. The stripes mean that the code in your class has not been compiled yet. That's okay.

4. Double click on this icon to open up the Editor.

5. BlueJ automatically fills your class with code. Go ahead and delete all of this stuff! You should always start with an empty file.

6. Type the following code into the Editor:

```
/**
    My first Java program
    @author Your Name
    @version The Date
*/
public class Test{
    public static void main(String[] args){
        System.out.println("This is a test of the emergency broadcast system!");
    }
}
```

Replace "Your Name" with your name and "The Date" with today's date.

7. Compile your code by clicking the `Compile` button in the left sidebar of the Project window. The stripes in the `Test` box should now go away unless you have an error in your code. *If your code doesn't compile, call me or one of the student TAs over.*

8. Run your code by right-clicking on the `Test` class in the Project window. Choose the option for the `main` method. This will open a dialogue box. Select `Ok`. (See the picture below)
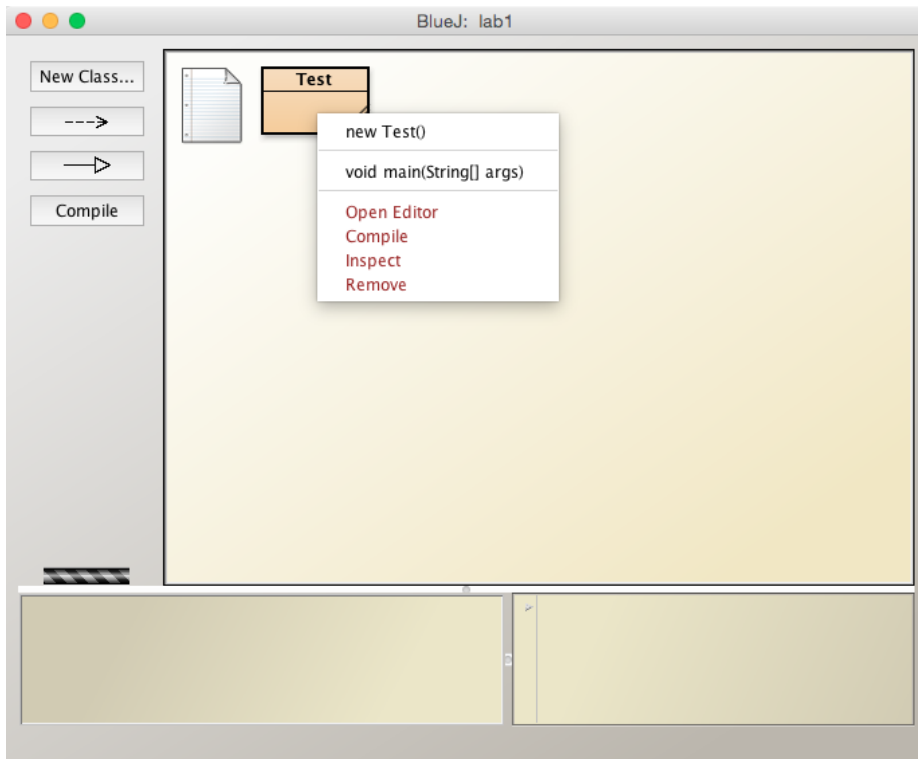
9. Congratulations! You have just written, compiled, and run your first Java application!

10. Now create a new Java class called `StudentInfo`. Inside this class, type the following text

```
/**
    Programming project 1.3
    @author Your Name
    @version The Date
*/
public class StudentInfo{
    public static void main(String[] args){

    }
}
```

You should replace "Your Name" with your name and "The Date" with today's date. In the `main` method, complete programming project 1.3 on page 55 of the textbook. In particular, use the same `System.out.println(...);` line of code from above to print out information about yourself. Be sure to label each piece of information in the output as the instructions specify.

Submitting your lab assignment

You will be submitting the `lab1` folder that BlueJ created for you. This folder should contain your `Test` class and `StudentInfo` class among other things. See below for instructions on how to submit assignments in this class:

1. Rename folder
To submit your assignment, navigate to your `cs161` folder using Windows Explorer (on Windows) or Finder (on Macs). Rename the folder that contains your Java code using the following convention:

labXX_firstName_lastName   for lab assignments
hwXX_firstName_lastName   for homework assignments

where "XX" is the number of the lab or homework assignment ("1", "2", "3", etc.). To rename a folder on a Windows machine, right-click and choose "Rename". To rename a folder on a Mac machine, click on the folder and hit the enter key.

2. Zip the folder
After you have renamed your folder, right-click on the folder and select "Send to > Zip file" (on Windows) or "Compress" (on Macs). This will generate a zipped (.zip) file.

3. Drag zipped file into Canvas
Log into Canvas and navigate to our course page. Click on "Assignments" and you will see links for each lab and homework assignment. Click on the appropriate link and then click "Submit Assignment". This will give you the option to upload a file. Upload the entire zipped file.

Good job, you've completed your first lab!